

Notice of Allowability

Application No.

09/548,892

Examiner

Wesley D Markham

Applicant(s)

INSLEY ET AL

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's after final amendment filed on 1/8/2004.
2. ☒ The allowed claim(s) is/are 25-31, 34-50 and 53.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other see attached Office Action.

WDM

WDM

DETAILED ACTION / ALLOWANCE

Response to Amendment

1. Acknowledgement is made of the after-final amendment filed by the applicant on 1/8/2004, in which Claims 1, 3 – 24, 32, 33, 51, and 52 were canceled, and Claim 53 was added. This amendment has been entered. Claims 25 – 31, 34 – 50, and 53 are currently pending in U.S. Application Serial No. 09/548,892, and an Office Action on the merits follows.

Claim Objections

2. The objection to Claim 12, set forth in paragraph 3 of the previous Office Action (i.e., the final rejection mailed on 9/11/2003), is withdrawn in light of the applicant's amendment in which Claim 12 was canceled.

Allowable Subject Matter

3. **Claims 25 – 31, 34 – 50, and 53** are allowed.
4. The following is an examiner's statement of reasons for allowance: A summary of the closest prior art of record follows. Popov et al. (Russian Document Number 423483) teaches a method of making a charged filter material, the method comprising condensing vapor onto a dielectric article (e.g., polypropylene or polyamide filaments) to form a condensate thereon, and then drying (i.e., removing condensate from) the article (See especially Example 1). Angadjivand et al. (USPN 5,496,507) teaches a method of making electrets, the method comprising impinging

Art Unit: 1762

jets of water onto a non-woven meltblown microfiber web and drying the web. Coufal et al. (USPN 5,280,406) teaches a method of making electrets, the method comprising charging a dielectric surface by means of a high velocity jet of fluid. Independent Claim 25 (from which Claims 36 – 38 and 42 – 50 depend) requires making an electret by placing a dielectric article in a liquid of a controlled environment, condensing vapor from the atmosphere of the controlled environment onto the dielectric article to form a condensate thereon, decreasing the pressure on the atmosphere to evaporate at least a portion of the liquid, and then drying the article. This specific evaporation / condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claim 25 is allowed. As Claims 36 – 38 and 42 – 50 depend from Claim 25, these claims are also allowed. Independent Claims 26 and 27 require particular methods of condensing vapor from the atmosphere of a controlled environment, specifically increasing the pressure on the atmosphere (Claim 26) or performing an adiabatic expansion (Claim 27), that are not taught or reasonably suggested by the prior art of record in the process of making an electret as claimed by the applicant. Therefore, Claims 26 and 27 are allowed. Independent Claim 28 (from which Claims 29 – 31 depend) requires altering a first property of a controlled environment to evaporate a portion of liquid into the atmosphere of the controlled environment, and altering a second property of the controlled environment in order to condense the vapor onto the surface of a dielectric article. This specific evaporation / condensation process used to form an electret is not taught or

Art Unit: 1762

reasonably suggested by the prior art of record, alone or in combination. Therefore, Claims 28 – 31 are allowed. Independent Claim 34 requires altering the volume of a controlled environment to evaporate a portion of liquid into the atmosphere of the controlled environment, and altering the volume of the controlled environment in order to condense the vapor onto the surface of a dielectric article. This specific evaporation / condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claim 34 is allowed. Independent Claim 35 (from which Claims 39 – 41 depend) requires altering at least one property selected from the group consisting of volume, pressure, or temperature of a controlled environment in order to condense vapor onto a dielectric article in the process of forming an electret. This specific condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claims 35 and 39 – 41 are allowed. Independent Claim 53 requires altering a first property of a controlled environment of a chamber such that at least a portion of a liquid in the controlled environment evaporates into the atmosphere, altering at least one second property of the environment so as to cause vapor of the atmosphere to condense on a dielectric article disposed in the controlled environment, and drying the article to remove the condensate, wherein the electret exhibits a persistent electric charge. This specific evaporation / condensation process used to form an electret having a persistent electric charge is not taught or reasonably suggested by the prior art of record, alone or in combination.

Art Unit: 1762

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D Markham whose telephone number is (571) 272-1422. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


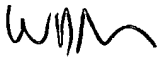
Wesley D Markham
Examiner
Art Unit 1762

Application/Control Number: 09/548,892

Page 6

Art Unit: 1762

WDM



SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700